

Snake Puzzles



Kit contains:

- Puzzle board
- Play-Doh

You will need: coloring supplies.



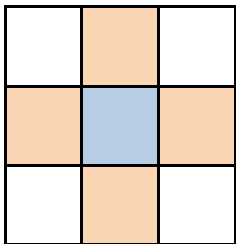
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INSTRUCTIONS

Follow the rules to move a Play-Doh snake across the game board starting from each of the different squares. If your snake can visit all of the squares, then color the starting square green. If your snake gets stuck, then color the starting square red.

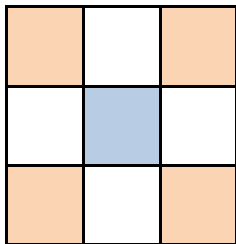
Rules:

- Snakes can only visit a square once (i.e., a snake cannot touch itself).
- Snakes always move to the smallest numbered square.
- Snakes move **orthogonally**.



Orthogonal

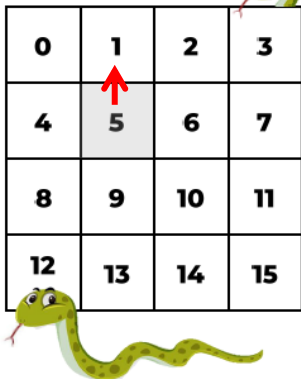
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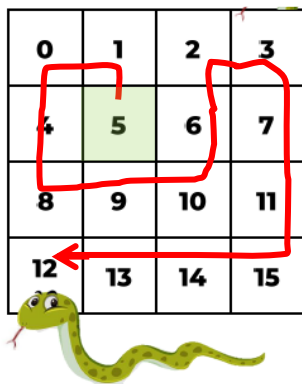
Diagonal

Roll out a long Play-Doh snake, and give it a try.
Here is an example starting from square 5.

The Snake Puzzle (easier version)



- Snake moves to the smallest number, 1.
- Snake moves to 0, 4, 8, 9, 10, and so on.



The snake visited all of the squares on the board. We can color 5 green!

Now let's try starting from square 2. Once the snake reaches 3, it has nowhere new left to go. We'll have to color 2 red.

Can you figure out why the snake could visit the whole board starting from square 5 but not from square 2?



HYPOTHESIZE! Which starting squares do you think will be green on the easier board? Which starting squares do you think will be red? Why? Were you right?

Now try the harder board. This will require a VERY long snake. Predict which squares will be green and which will be red. Were you right? Can you spot a pattern?